



Accommodating Electric Service Customers: Plain Vanilla or 31 Flavors?

Ken Costello

Principal Researcher

National Regulatory Research Institute

kcostello@nrri.org

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Four Takeaways

- A major driver of electric-industry transformation is the expectation that customers will become more engaged and impose higher demands upon their utility
- As with companies in other industries, electric utilities will have a bifurcation of customers (e.g., the “digital divide”)
- This bifurcation (passive v active customers) will pose new challenges for regulators
- Regulators have available different options for addressing these challenges

Recent Developments

- Conditions favor the emergence of active customers
 - ❑ Economic
 - ❑ Availability of new technologies
 - ❑ Younger generation's affinity with gadgets
- Customer empowerment is a major impetus of electric industry reforms
- The ongoing dialogue on (1) rate reforms, (2) the role of new technologies and (3) the utility business model centers on the new electricity consumer, who wants more than reliable service at just and reasonable rates
- Empowering utility customers requires
 - ❑ Availability of unbundled products and services (e.g., discretionary services outside of basic services)
 - ❑ Timely and useful information
 - ❑ Enabling technology (e.g., to lower transaction cost)

What Do Active Customers Really Want?

- Generally, more control and choice
 - Real-time information
 - The capability to reduce their utility bill
 - Clean energy
 - Greater than historical levels of service reliability and resiliency
 - The ability to self-generate
 - Opportunities as “prosumers” to sell unused electricity back to the utility
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Customers want different flavors

Active Versus Passive Customers

- Passive customers view electricity as a commodity (Plain Old Electric Service, POES) whereas active customers see electricity more as a value-added service
- What explains this distinction?
 - ✓ Are passive customers rational?
 - ✓ What makes other customers active?
- At this point, we don't know what share of customers will be anything other than passive; the trend is clear, but it is uncertain how and how many customer will become active
- One thought contrary to conventional wisdom is that because electricity costs are a small percentage of the average customer's income and total spending, it would be no surprise if most customers continue to want only POES

Additional Burden on Utilities

- Unbundling of services and their pricing
- Investments for upgrading the grid and diversifying its use
- Better communications with customers (e.g., with social media)
- Customer demand for real-time information
- Investments for greater generation diversity (e.g., clean energy technologies)
- Other investments (e.g., smart meters)
- Higher revenue and profit uncertainty
- Erosion of monopoly status
- Heightened planning uncertainty (e.g., unknown how many customers will switch from full-service to partial-service status)

Overall, utilities incur higher costs and face greater risk

Challenges for Regulators

- What should they expect from utilities in serving new customer demands?
- Who should pay for new required investments, and how?
- What role should third-party (e.g., competitive) providers play in satisfying customers' new demands?
- How can utilities remain financially healthy?
- What restrictions and liberties should third-party providers have?
- How can regulators guarantee an economic level-playing field between utilities and third-party providers?
- What barriers to consumer activism exist today, and how can regulators mitigate them efficiently and equitably?

Primary Regulatory Objectives

- Balancing of interests (active v passive customers)
- Maximizing the long-term interests of active and passive customers collectively
- Prohibiting undue discrimination against third-party providers who serve active customers
- Preventing cross-subsidization funded by passive customers
- Including only prudent utility costs in rates
- Allowing reasonable utility returns from serving active customers
- Questionable whether one objective should be to encourage customers to become more active



Options for Advancing Regulatory Objectives

- Mindful of the balancing principle underlying regulation; that is, protecting passive customers while serving active customers
- Radical versus incremental approach
- Role of utilities versus third parties
- Ratemaking reforms
- Exploiting differences in customer preferences
- Third-party access to the utility distribution system
- New utility business model
- Bolstering of R&D/new technologies

Where Are We Now?

- Diversity of actions across states
- Partial adoption of smart technologies and their less-than-full exploitation
- More hype than results (high noise to sound ratio)
- Regulators grappling with ratemaking and new business models
- Regulators wanting to encourage DG but concern over the effect on passive customers
- Overall, we are in a transition to something different, but uncertain over how, when and how prevalent